






Proofs

 $\angle x + \angle y = 180^\circ$ (SAT)

 $\angle x + \angle y = 90^\circ$ (CAT)

 $\angle x = \angle x$ (OAT)

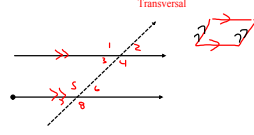
 $\angle x + \angle y + \angle z = 180^\circ$
(sum of int Δ)

 all angles in a four sided polygon = 360°
(sum of int \square)

Nov 21-8:31 AM

Parallel Lines -6.1 p. 357

Transversal



perpendicular = 90°

① CAT-Complementary Angle Theorem
 $x + y = 90^\circ$

② SAT-Supplementary Angle Theorem
 $x + y = 180^\circ$

③ (Sum of int Δ)
 $x + y + z = 180^\circ$

④ (Sum of int quad)
 $w + x + y + z = 360^\circ$

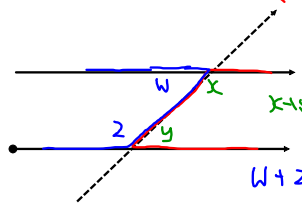
⑤ (OAT)
opposite angles in an intersection are equal
 $x = x$
 $y = y$

May 6-12:06 PM

Parallel Angle Theories

(C pattern)
(Z pattern)
(F pattern)

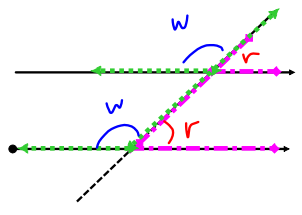
Co interior (C pattern)



$x + y = 180^\circ$ (C pattern)

$w + z = 180^\circ$ (C pattern)

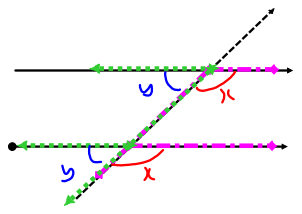
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Corresponding Angles (F pattern)

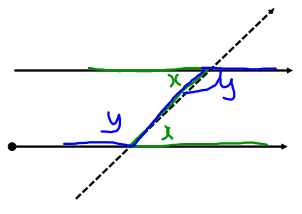
- corresponding angles are equal



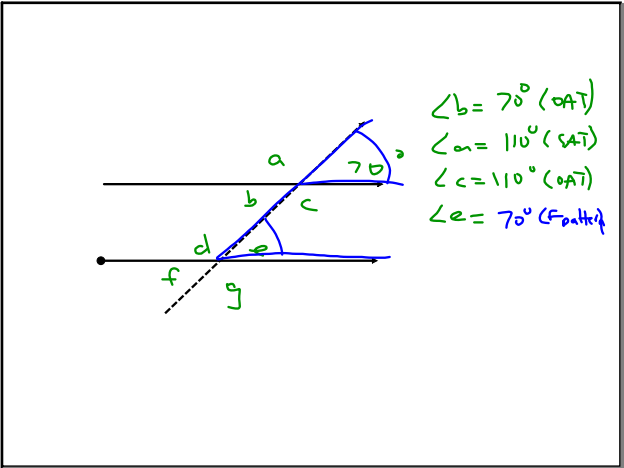
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Alternate Angles (Z pattern)

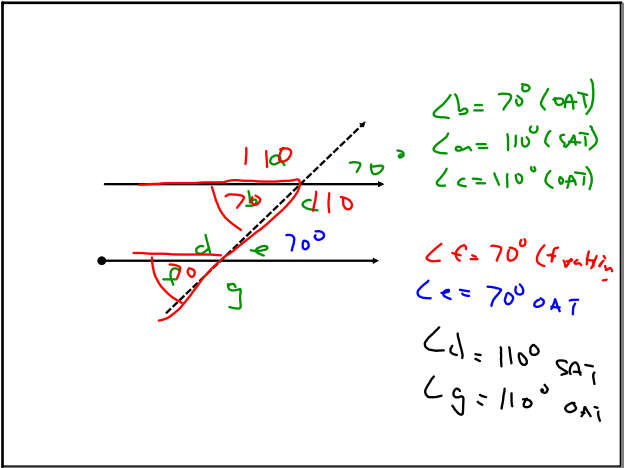
alternate angles are equal



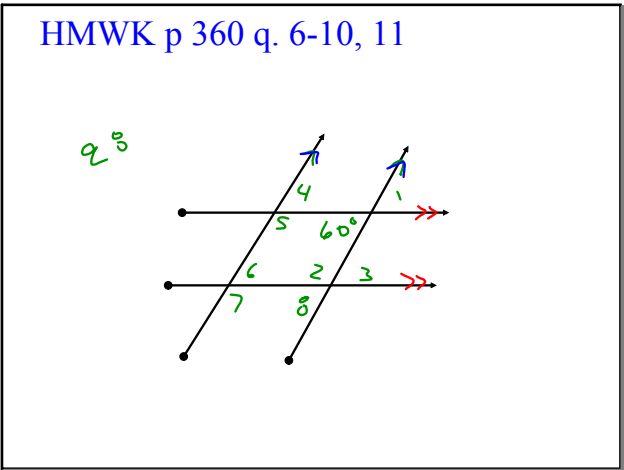
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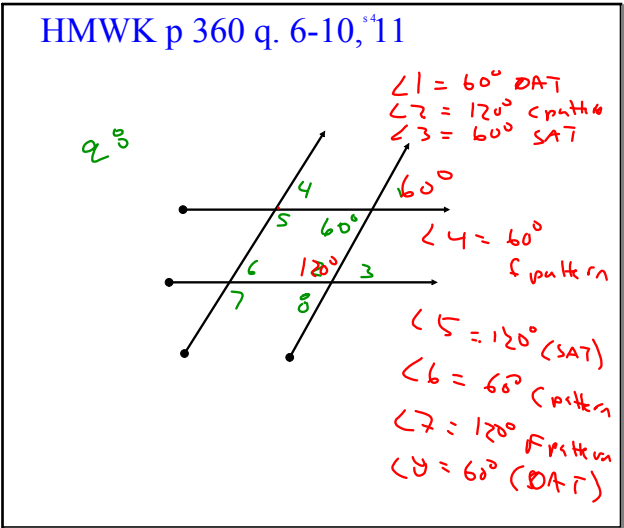
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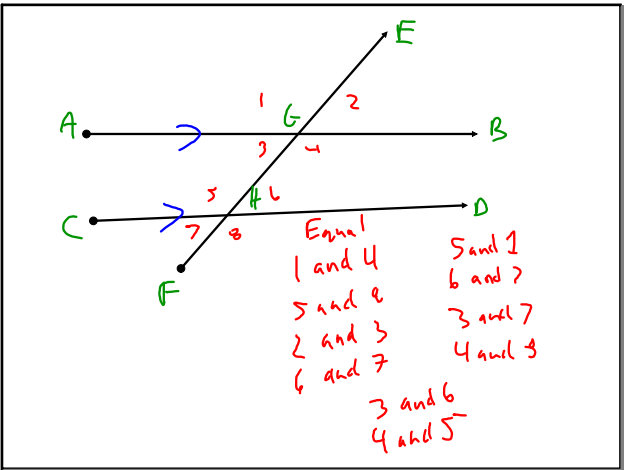
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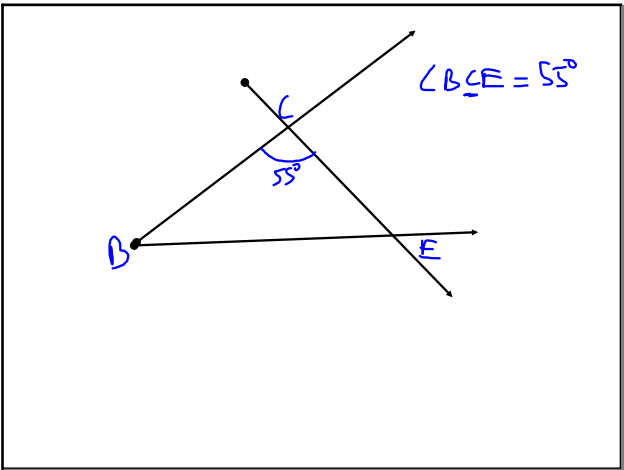
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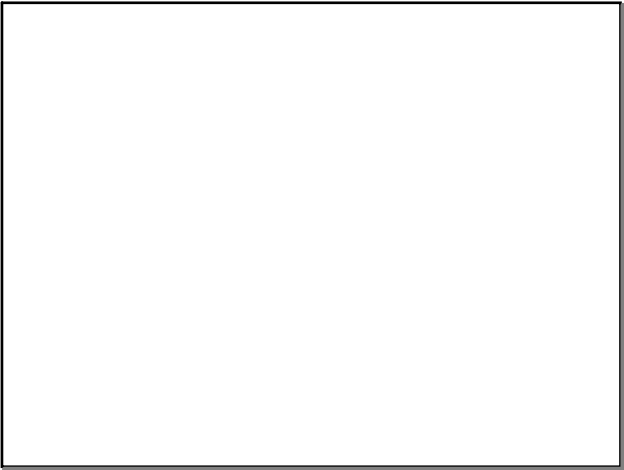
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May 7-2:51 PM



May 7-3:00 PM



Nov 20-1:38 PM